

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Jeff EDER

Serial No.: 10/025,794

Filed: December 26, 2001

For: A Process Optimization System

Group Art Unit: 3693

Examiner: Richard Weisberger

**Supplemental Brief on Appeal**

Commissioner of Patents

Washington, D.C. 20321

Sir or Madam:

The Appellant respectfully appeals the rejection of claim 48, claim 49, claim 50, claim 51, claim 52, claim 53, claim 54, claim 55, claim 56, claim 57, claim 58, claim 59, claim 60, claim 61, claim 62, claim 63, claim 64, claim 65, claim 66, claim 67 and claim 68 in the March 31, 2008 Office Action for the above referenced application.

This supplemental brief on appeal is being submitted to correct a recently discovered clerical error in the Summary of Claimed Subject Matter.

### **1. Real party in interest**

Asset Reliance, Inc. (dba Asset Trust, Inc.) is the assignee of 100% interest in the above referenced patent application.

### **2. Related appeals**

An appeal for U.S. Patent Application 10/012,375 filed December 12, 1001 may be affected by or have a bearing on this appeal.

### **3. Status of Claims**

Claim 48, claim 49, claim 50, claim 51, claim 52, claim 53, claim 54, claim 55, claim 56, claim 57, claim 58, claim 59, claim 60, claim 61, claim 62, claim 63, claim 64, claim 65, claim 66, claim 67 and claim 68 are rejected and are the subject of this appeal. Claim 35, claim 36, claim 37, claim 38, claim 39, claim 40, claim 41, claim 42, claim 43, claim 44, claim 45, claim 46 and claim 47 are rejected and are not part of this appeal. Claim 35, claim 44, claim 45 and claim 67 are amended. Claims 1 – 34 are cancelled.

### **4. Status of Amendments**

An Amendment/Reply with an amendment to claim 35, claim 44, claim 45 and claim 67 was submitted after final rejection on July 31, 2008. With the exception of claim 67 which was amended to correct a typo, the amended claims and dependent claims that rely on the amended independent claim are not included in this appeal as noted under item 3.

### **5. Summary of Claimed Subject Matter**

One embodiment of a process optimization system according to the present invention is best depicted in Figure 1 of the specification for the instant application. Figure 1 gives an overview of the three major processing steps which include data extraction and storage (200), data analysis (300) and reporting the results of the analysis (400). The support in the specification for each claim is summarized below (in parentheses).

48. A program storage device readable by a computer, tangibly embodying a program of instructions executable by at least one computer to perform an optimization method, comprising: obtaining a computational model of organization financial performance that identifies a contribution to an organization value and an organization risk for each of one or more elements of value, external factors and risks for each of one or more segments of enterprise value, (FIG. 6C reference numbers 342 – 354, FIG. 6D reference numbers 358, 361, and 363

– 369, FIG. 6E reference numbers 371 – 380, FIG. 6F reference numbers 383 – 389 and 392 – 395, line 20, page 14 through line 2, page 55 of the June 5, 2007 amendment incorporating material from cross referenced applications)

a process specification that identifies one or more expected process outputs, a plurality of organization related transaction data and a plurality of process feature data (FIG. 5A, reference number 207, line 11, page 6 through, line 10, page 7 and line 20, page 13 through line 22, page 16 of the specification)

identifying an impact of each process feature on the expected process outputs (line 11, page 6 through, line 10, page 7 and line 20, page 13 through line 22, page 16 of the specification);

mapping the expected process outputs to the computational model of organization financial performance (FIG 5A, reference number 207, line 11, page 6 through, line 10, page 7 and line 20, page 13 through line 22, page 16 of the specification);

creating a financial simulation model for the organization using said mappings, model and process data (FIG. 6A, reference numbers 301, 311, FIG. 6B, reference numbers 321 – 329, 331, 333 and 335, line and 12, page 21 through line 15, page 29 of the specification);

determining an optimal mix of process features using said simulation model (FIG. 6A, reference numbers 301, 311, FIG. 6B, reference numbers 321 – 329, 331, 333 and 335, line and 12, page 21 through line 15, page 29 of the specification), and

displaying the result using a paper document or an electronic display (FIG. 7 and FIG. 8, reference numbers 402 and 403, FIG. 9 and line 1, page 30 through line 3, page 32 of the specification)

where the computational model of financial performance analyzes the portfolio effect associated with organization risks and optionally produces two or more reports detailing organization market value and risk by element of value, external factor and risk for each of one or more segments of enterprise value in a matrix format (FIG. 7 and FIG. 8, reference numbers 402 and 403 and line 1, page 30 through line 3, page 32 of the specification).

49. The program storage device of claim 48 where an organization is a single product, a group of products, a division, a company, a multi-company corporation, a value chain or a collaborative multi-enterprise operation (FIG. 5A, reference number 206 and line 30, page 16 through line 2, page 17).

50. The program storage device of claim 48 where the method further comprises identifying an optimal mix of processes for an organization (FIG. 5A, reference number 206 and line 30, page 16 through line 2, page 17).

51. The program storage device of claim 48 where an optimal mix of process features is a mix that achieves financial goals selected from the group consisting of maximize organization value, minimize organization risk and combinations thereof (FIG. 6F, reference number 393, FIG. 9, and line 1, page 53 through line 22, page 53 of the June 5, 2007 amendment incorporating material from cross referenced applications).

52. The program storage device of claim 48 where a plurality of process feature data encapsulate the different options the process manager has for using the resources required to produce the process outputs (line 11, page 6 through, line 10, page 7 and line 20, page 13 through line 22, page 16 of the specification).

53. The program storage device of claim 48 where a plurality of process feature data identifies any options for implementing a process or a process feature at a future date (line 11, page 6 through, line 10, page 7 and line 20, page 13 through line 22, page 16 of the specification).

54. The program storage device of claim 48 where a plurality of process specification data further comprises data selected from the group consisting of design data, financial data, operating factor data, commodity prices and combinations thereof (FIG. 3, reference numbers 10, 15 and 30 and page 11, lines 6 through 17 of the specification).

55. The program storage device of claim 48 where a plurality of process specification data and feature data are obtained from databases selected from the group consisting of a design system database, a process financial system database, an operating factor database and combinations thereof (FIG. 3, reference numbers 10, 15 and 30 and page 11, lines 6 through 17 of the specification).

56. The program storage device of claim 48 where process simulation system data are optionally used to support method steps selected from the group consisting of identifying an impact of one or more process features on one or more process outputs, identifying an impact of one or more process outputs on a computational model of financial performance and

combinations thereof (FIG 5B, reference number 223 and 224 and line 1, page 19 through line 33, page 19).

57. The program storage device of claim 48 where organization risks are selected from the group consisting of variability risks, market volatility risks, contingent liabilities, event risks, extreme risks, normal risks and combinations thereof (line 6, page 5 through line 8, page 5, Table 1, page 15 of the specification, FIG. 6E, reference number 368 and line 12, page 32 through line 20, page 34 of the June 5, 2007 amendment incorporating material from cross referenced applications).

58. The program storage device of claim 48 where the one or more elements of value are selected from the group consisting of alliances, brands, channels, customers, customer relationships, employees, employee relationships, equipment, knowledge, information technology, intellectual property, investors, partnerships, processes, production equipment, quality, vendors, supply chains, vendor relationships, visitors and combinations thereof ( ) and where the one or more organization segments of value are selected from the group consisting of current operation, real option, derivatives, excess financial assets, market sentiment and combinations thereof (line 3, page 5 through line 8, page 5 of the specification).

59. A process optimization apparatus, comprising:

a computational model of organization financial performance that identifies a contribution to an organization value and an organization risk for each of one or more elements of value, external factors and risks for each of one or more segments of enterprise value (FIG. 6C reference numbers 342 – 354, FIG. 6D reference numbers 358, 361, and 363 – 369, FIG. 6E reference numbers 371 – 380, FIG. 6F reference numbers 383 – 389 and 392 – 395, line 20, page 14 through line 2, page 55 of the June 5, 2007 amendment incorporating material from cross referenced applications),

an organization related process specification that identifies one or more expected process outputs and a plurality of process feature data (FIG. 5A, reference number 207, line 11, page 6 through, line 10, page 7 and line 20, page 13 through line 22, page 16 of the specification),  
means for storing and processing said computational model, specification and data,  
means for identifying an impact of each feature on one or more expected process outputs (line 11, page 6 through, line 10, page 7 and line 20, page 13 through line 22, page 16 of the specification);

means for mapping the expected process outputs to the computational model of organization financial performance (FIG 5A, reference number 207, line 11, page 6 through, line 10, page 7 and line 20, page 13 through line 22, page 16 of the specification);

means for creating a financial simulation model for the organization using said mappings, model and data (FIG. 6A, reference numbers 301, 311, FIG. 6B, reference numbers 321 – 329, 331, 333 and 335, line and 12, page 21 through line 15, page 29 of the specification);

means for determining an optimal mix of process features using said simulation model (FIG. 6A, reference numbers 301, 311, FIG. 6B, reference numbers 321 – 329, 331, 333 and 335, line and 12, page 21 through line 15, page 29 of the specification), and

means for displaying the optimal mix using a paper document or an electronic display (FIG. 7 and FIG. 8, reference numbers 402 and 403, FIG. 9 and line 1, page 30 through line 3, page 32 of the specification)

where the computational model of financial performance analyzes the portfolio effect associated with organization elements of value, external factors and organization risks (FIG. 7 and FIG. 8, reference numbers 402 and 403 and line 1, page 30 through line 3, page 32 of the specification).

60. The apparatus of claim 59 that optionally displays an impact of the optimized feature mix on a position of the organization relative to an efficient frontier (FIG. 8, reference number 403, FIG. 9, and line 9, page 31 through line 13, page 31 of the specification) .

61. The apparatus of claim 59 that further comprises identifying an optimal mix of processes for the organization (FIG. 5A, reference number 206 and line 30, page 16 through line 2, page 17).

62. The apparatus of claim 59 where an optimal mix is the mix that maximizes organization value while minimizing organization risk (FIG. 6F, reference number 393, FIG. 9. and line 1, page 53 through line 22, page 53 of the June 5, 2007 amendment incorporating material from cross referenced applications).

63. The apparatus of claim 59 where a plurality of process feature data encapsulate the different options the process manager has for using the resources required to produce the process outputs (line 11, page 6 through, line 10, page 7 and line 20, page 13 through line 22, page 16 of the specification).

64. The apparatus of claim 59 where a plurality of process feature data identifies any options for implementing a process feature at a future date (line 11, page 6 through, line 10, page 7 and line 20, page 13 through line 22, page 16 of the specification).

65. The apparatus of claim 59 where a process specification further comprises data selected from the group consisting of design data, financial data, operating factor data, commodity prices and combinations thereof (FIG. 3, reference numbers 10, 15 and 30 and page 11, lines 6 through 17 of the specification).

66. The apparatus of claim 59 where a process specification and a plurality of feature data are obtained from databases selected from the group consisting of a design system database, a process financial system database, an operating factor database and combinations thereof. (FIG. 3, reference numbers 10, 15 and 30 and page 11, lines 6 through 17 of the specification).

67. The apparatus of claim 59 where process simulation system data are optionally used to support method steps selected from the group consisting of identifying an impact of one or more process features on one or more process outputs, identifying an impact of one or more process outputs on a matrix of value, identifying an impact of one or more process outputs on a matrix of risk and combinations thereof (FIG 5B, reference number 223 and 224 and line 1, page 19 through line 33, page 19).

68. The apparatus of claim 67 where an organization matrix of risk is defined by one or more organization segments of value and one or more organization related risks where the segments of value are selected from the group consisting of current operation, real option, derivative, excess financial asset, market sentiment and combinations thereof (line 3, page 5 through line 8, page 5 of the specification) and where the organization risks are selected from the group consisting of variability risks, market volatility risks, contingent liabilities, event risks, extreme risks, normal risks, strategic risks and combinations thereof (line 6, page 5 through line 8, page 5, Table 1, page 15 of the specification, FIG. 6E, reference number 368 and line 12, page 32 through line 20, page 34 of the June 5, 2007 amendment incorporating material from cross referenced applications).

## **6. Grounds of rejection to be reviewed on appeal**

**Issue 1** – Whether claim 48, claim 49, claim 50, claim 51, claim 52, claim 53, claim 54, claim 55, claim 56, claim 57, claim 58, claim 59, claim 60, claim 61, claim 62, claim 63, claim 64, claim 65, claim 66, claim 67 and claim 68 are indefinite under 35 USC 112 second paragraph.

**Issue 2** – Other informalities.

## **7. The Argument**

For each ground of rejection which Appellant contests herein which applies to more than one claim, such additional claims, to the extent separately identified and argued below, do not stand and fall together.

**Issue 1** – Whether claim 48, claim 49, claim 50, claim 51, claim 52, claim 53, claim 54, claim 55, claim 56, claim 57, claim 58, claim 59, claim 60, claim 61, claim 62, claim 63, claim 64, claim 65, claim 66, claim 67 and claim 68 are indefinite under 35 USC 112 second paragraph?

The Assignee will respectfully traverse the §112 second paragraph rejections of each claim in two ways. First, by noting that the Office Action has failed to establish a prima facie case that the claims do not meet the requirements of §112 second paragraph. Second, by noting that the claim rejections based on assertions of alleged indefiniteness are not in compliance with the Administrative Procedures Act and are therefore moot.

The first way the Assignee will traverse the 35 U.S.C. §112 second paragraph rejection of claim 48, claim 49, claim 50, claim 51, claim 52, claim 53, claim 54, claim 55, claim 56, claim 57, claim 58, claim 59, claim 60, claim 61, claim 62, claim 63, claim 64, claim 65, claim 66, claim 67 and claim 68 will be by noting that the arguments presented by the Examiner in the March 31, 2008 Office Action fail to establish the prima facie case required to sustain a §112 second paragraph rejection. *MPEP 2173.02 states that: definiteness of claim language must be analyzed, not in a vacuum, but in light of:*

- (A) The content of the particular application disclosure;*
- (B) The teachings of the prior art; and*
- (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.*

*In reviewing a claim for compliance with 35 U.S.C. 112, second paragraph, the examiner must consider the claim as a whole to determine whether the claim apprises one of ordinary skill in*



*the art of its scope and, therefore, serves the notice function required by 35 U.S.C. 112, second paragraph, by providing clear warning to others as to what constitutes infringement of the patent. See, e.g., Solomon v. Kimberly-Clark Corp., 216 F.3d 1372, 1379, 55 USPQ2d 1279, 1283 (Fed. Cir. 2000). See also In re Larsen, No. 01-1092 (Fed. Cir. May 9, 2001).* In the case of claim 48, claim 49, claim 50, claim 51, claim 52, claim 53, claim 54, claim 55, claim 56, claim 57, claim 58, claim 59, claim 60, claim 61, claim 62, claim 63, claim 64, claim 65, claim 66, claim 67 and claim 68 there are four reasons Examiner has failed to establish the prima facie case that the specification does not meet the requirements of §112 second paragraph for every rejected claim. The reasons the Examiner has failed to establish a prima facie case of indefiniteness are:

**Reason #1** The first reason the Examiner has failed to establish a prima facie case of indefiniteness is that the Examiner has failed to consider the claims as a whole as detailed below:

Claim 48 Taken as a whole, claim 48 describes an article of manufacture that instructs a machine to transform data into a model of element of value and external factor contribution to organization financial performance and obtain a process output specification before using the model and specification to identify the specific set of features that can be used to operate the process in a way that will optimize the financial performance of the process owner.

Claim 59 Taken as a whole, claim 59 describes a machine that transforms data into a model of element of value and external factor contribution to organization financial performance and obtain a process output specification before using the model and specification to identify the specific set of features that can be used to operate the process in a way that will optimize the financial performance of the process owner.

Claim 49, claim 50, claim 51, claim 52, claim 53, claim 54, claim 55, claim 56, claim 57 and claim 58, claim 60, claim 61, claim 62, claim 63, claim 64, claim 65, claim 66, claim 67 and claim 68: the Examiner did not allege any that there was any uncertainty associated with the meaning of any terms in these claims and/or that there was an uncertainty associated with meaning of any of the claims.

**Reason #2** The second reason the Examiner has failed to establish a prima facie case of indefiniteness is that the Examiner has failed to interpret the claims in light of the specification as detailed below:

Claim 48 and 59: the Examiner has alleged that there were a number of sources of vague uncertainty associated with the language in these claims. As shown below, the specification and drawings clearly define the meaning of each allegedly confusing term or phrase.

Alleged area of uncertainty	Traversal includes
a) Does model of organization financial performance produce both value and risk outputs	The claims clearly state that <u>both value and risk</u> are modeled. The application specification and drawings clearly explain/illustrate how the model is developed and used to complete analyses cited in a) and the relationship between the variables cited in b). Please see FIG. 6C reference numbers 342 – 354, FIG. 6D reference numbers 358, 361, and 363 – 369, FIG. 6E reference numbers 371 – 380, FIG. 6F reference numbers 383 – 389 and 392 – 395, FIG. 7 and line 20, page 14 through line 2, page 55 of the June 5, 2007 amendment.
b) How the contributions of elements of value, external factors and risks relate to organization value and risk	Furthermore, <u>the relevance of these alleged uncertainties to claim interpretation is unclear.</u>
c) Mapping outputs	The application specification and drawings clearly explain/illustrate that process deliverables are mapped to cells within the matrix of value and/or the matrix of risk. Outputs are defined as the economic benefit(s) associated with a process deliverable and economic benefits are defined as "improving the value or reducing the risk associated with one or more cells within the matrix of value and/or the matrix of risk." The process management system database (30) and/or the user can be the source of the process output specification. Please see FIG 5A reference number 207, FIG. 7, pages 6 and 7, and line 3 through line 8 of page 17 of the application specification.
d) A process specification that identifies one or more expected process outputs	
e) Scope of financial simulation	The scope is the financial performance of the process owner when using the process for defined scenarios as mentioned in the abstract and as detailed in the specification. Scope of financial performance is defined by the value and risk being analyzed (see a) above). Please see the same drawings and portions of the application specification cited for a) and b).

Claim 49, claim 50, claim 51, claim 52, claim 53, claim 54, claim 55, claim 56, claim 57, claim 58, claim 60, claim 61, claim 62, claim 63, claim 64, claim 65, claim 66, claim 67 and claim 68: the Examiner did not allege any that there was any uncertainty associated with the meaning of any terms in these claims and/or that there was an uncertainty associated with meaning of any of the claims.

**Reason #3** The third reason the Examiner has failed to establish a prima facie case of indefiniteness is that the Examiner has failed to provide any evidence that someone of average skill in the relevant arts would have difficulty interpreting the scope of the claims as detailed below:

Claim 48 and 59: the Examiner has alleged that there were several sources or vague uncertainty associated with the language in these claims. As detailed below, the meaning of the words in the allegedly confusing phrases are clear to anyone of average skill in the art.

I. Alleged uncertainty as to whether or not the model of organization financial performance produces an output of both value and risk. The reason for the alleged uncertainty is unclear because the claims clearly state that contributions to organization value and organization risk are both being modeled and that the model is used in optimization analyses.

II. Alleged uncertainty as to how the contributions of the elements of value, external factors and risks relate to organization value and an organization risk for each of one or more segments of enterprise value. The reason for the alleged uncertainty is unclear because the meaning of each word in the phrase (particularly "contribution") is well known to those of average skill in the art and FIG. 7 clearly illustrates the concept. Furthermore, the relevance of this alleged uncertainty to claim interpretation is unclear.

III. Alleged uncertainty regarding a process specification that identifies one or more expected process outputs. The reason for the alleged uncertainty is unclear because the meaning of the words in the phrase are well known and as discussed previously the specification clearly explains that the process management system database (30) and/or the user can be the source for the process output specification.

IV. Alleged uncertainty regarding the outputs that are mapped to the model of organization financial performance. As discussed previously, the meaning of the term "process output" is clearly defined in the application specification and using the matrix cell identified in the process output specification to map the process deliverable(s) to

the model of organization financial performance is a concept that is readily understood by those of average skill in the art. Furthermore, the concept is illustrated in the application specification with a specific example (see summary of claimed subject matter and FIG. 7).

V. The reason for the alleged uncertainty regarding the scope of the financial simulation for the organization that uses the mappings, model and data is unclear as the plain meaning of the terms adequately define the scope.

Claim 49, claim 50, claim 51, claim 52, claim 53, claim 54, claim 55, claim 56, claim 57, claim 58, claim 60, claim 61, claim 62, claim 63, claim 64, claim 65, claim 66, claim 67 and claim 68: the Examiner did not allege any that there was any uncertainty associated with the meaning of any terms in these claims and/or that there was an uncertainty associated with meaning of any of the claims.

**Reason #4** The fourth reason the Examiner has failed to establish a prima facie case of indefiniteness is that the Examiner has failed to provide any evidence that that the limitation(s) in the claims fail to describe the invention as detailed below:

Claim 48, claim 49, claim 50, claim 51, claim 52, claim 53, claim 54, claim 55, claim 56, claim 57, claim 58, claim 59, claim 60, claim 61, claim 62, claim 63, claim 64, claim 65, claim 66, claim 67 and claim 68. The Examiner has not presented any information or evidence that the rejected claims do not describe the invention.

**Reason #5** As noted previously, another way the Assignee will respectfully traverse the §112 second paragraph rejections of claim 48, claim 49, claim 50, claim 51, claim 52, claim 53, claim 54, claim 55, claim 56, claim 57, claim 58, claim 59, claim 60, claim 61, claim 62, claim 63, claim 64, claim 65, claim 66, claim 67 and claim 68 is by noting that the assertions regarding the alleged indefiniteness of the claims are not in compliance with the requirements of the Administrative Procedures Act and are therefore moot. In *Dickinson v. Zurko*, 119 S. Ct. 1816, 50 USPQ2d 1930 (1999), the Supreme Court held that the appropriate standard of review of U.S.P.T.O. findings are the standards set forth in the Administrative Procedure Act ("APA") at 5 U.S.C. 706 (1994). The APA provides two standards for review – an arbitrary and capricious standard and a substantial evidence standard. The Assignee respectfully submits that discussion in the preceding paragraphs clearly shows that the Examiner has failed to provide even a scintilla of evidence to support the allegation that the claims do not meet the

requirements of §112 second paragraph and that as a result has failed to meet the substantial evidence standard. In particular the Examiner has not identified any possible interpretations of the claims that would represent a “scope” that is not supported by the claimed invention.

The Assignee respectfully submits that the 31 March 2008 Office Action also fails to pass the arbitrary and capricious test because there is no evidence of fact finding that can be rationally or irrationally connected to the claim rejections. Further evidence of the arbitrary and capricious nature of these claim rejections can be found by comparing the claim rejections in the above referenced application with the prosecution history for the related appeal for application 10/012,375. Application 10/012,375 uses an almost completely identical approach for optimizing the financial performance of a project.

Alleged area of uncertainty	Traversal includes
1) Does model of organization financial performance produce both value and risk outputs	Application 10/012,375 uses an identical model of organization financial performance and no questions were ever raised about the model outputs in the 3 Office Actions for 10/012,375.
2) How the contributions of elements of value, external factors and risks relate to organization value and risk	Application 10/012,375 uses an identical method for relating elements of value, external factors and risks to organization value and risk and no questions were ever raised about the relationship between these variables in the 3 Office Actions for 10/012,375.
3) Mapping outputs.	Application 10/012,375 uses a similar method for mapping outputs and no questions were ever raised about the mapping method in the 3 Office Actions for 10/012,375.
4) Scope of financial simulation	Application 10/012,375 uses a similar scope for simulations and no questions were ever raised about simulation scope in the 3 Office Actions for 10/012,375.

The Assignee notes that there are still other ways in which these claim rejections can be shown to be arbitrary, capricious and discriminatory.

## **Issue 2 – Other informalities.**

In the 31 March 2008 Office Action claims 35 – 68 are rejected under 35 U.S.C. §112 first paragraph on the basis of Examiner's assertion that cross referenced application 09/994,739 is an unrelated application. This erroneous assertion appears to have been caused by a typo. The last few words of the first paragraph on page 1 should be amended to read "the disclosures of which are incorporated herein by reference." The Appellant has been advised by outside counsel that correcting this obvious typo is an informality which the Examiner can easily handle.

The Appellant also traverses these claim rejections by noting that: application 09/994,720 and 09/994,739 both contain all the material previously incorporated by amendment and that the originally filed specification for the instant application clearly identifies applications 09/994,720 and 09/994,739 as cross referenced applications that were incorporated by reference in the first paragraph of page 1, line 25 of page 6 and line 5 of page 15 and that the Examiner has not provided any evidence that would establish that there is a written description deficiency. Furthermore, no such deficiency was alleged in the first two Office Actions.

## **8. Conclusion**

For the reasons detailed above, the Appellant respectfully but forcefully contends that each claim is patentable. Therefore, reversal of all rejections is courteously solicited.

Respectfully submitted,  
Asset Trust, Inc.

/B.J. Bennett/

B.J. Bennett, President  
Dated: November 24, 2008

## 9. Claims Appendix

48. A program storage device readable by a computer, tangibly embodying a program of instructions executable by at least one computer to perform an optimization method, comprising:

- obtaining a computational model of organization financial performance that identifies a contribution to an organization value and an organization risk for each of one or more elements of value, external factors and risks for each of one or more segments of enterprise value, a process specification that identifies one or more expected process outputs, a plurality of organization related transaction data and a plurality of process feature data,
- identifying an impact of each process feature on the expected process outputs;
- mapping the expected process outputs to the computational model of organization financial performance;
- creating a financial simulation model for the organization using said mappings, model and process data;
- determining an optimal mix of process features using said simulation model, and
- displaying the result using a paper document or an electronic display

where the computational model of financial performance analyzes the portfolio effect associated with organization risks and optionally produces two or more reports detailing organization market value and risk by element of value, external factor and risk for each of one or more segments of enterprise value in a matrix format.

49. The program storage device of claim 48 where an organization is a single product, a group of products, a division, a company, a multi-company corporation, a value chain or a collaborative multi-enterprise operation.

50. The program storage device of claim 48 where the method further comprises identifying an optimal mix of processes for an organization.

51. The program storage device of claim 48 where an optimal mix of process features is a mix that achieves financial goals selected from the group consisting of maximize organization value, minimize organization risk and combinations thereof.

52. The program storage device of claim 48 where a plurality of process feature data encapsulate the different options the process manager has for using the resources required to produce the process outputs.

53. The program storage device of claim 48 where a plurality of process feature data identifies any options for implementing a process or a process feature at a future date.

54. The program storage device of claim 48 where a plurality of process specification data further comprises data selected from the group consisting of design data, financial data, operating factor data, commodity prices and combinations thereof.

55. The program storage device of claim 48 where a plurality of process specification data and feature data are obtained from databases selected from the group consisting of a design system database, a process financial system database, an operating factor database and combinations thereof.

56. The program storage device of claim 48 where process simulation system data are optionally used to support method steps selected from the group consisting of identifying an impact of one or more process features on one or more process outputs, identifying an impact of one or more process outputs on a computational model of financial performance and combinations thereof.

57. The program storage device of claim 48 where organization risks are selected from the group consisting of variability risks, market volatility risks, contingent liabilities, event risks, extreme risks, normal risks and combinations thereof.

58. The program storage device of claim 48 where the one or more elements of value are selected from the group consisting of alliances, brands, channels, customers, customer relationships, employees, employee relationships, equipment, knowledge, information technology, intellectual property, investors, partnerships, processes, production equipment, quality, vendors, supply chains, vendor relationships, visitors and combinations thereof and where the one or more organization segments of value are selected from the group consisting of current operation, real option, derivatives, excess financial assets, market sentiment and combinations thereof.

59. A process optimization apparatus, comprising:

a computational model of organization financial performance that identifies a contribution to an organization value and an organization risk for each of one or more elements of value, external factors and risks for each of one or more segments of enterprise value,



an organization related process specification that identifies one or more expected process outputs and a plurality of process feature data,  
means for storing and processing said computational model, specification and data,  
means for identifying an impact of each feature on one or more expected process outputs;  
means for mapping the expected process outputs to the computational model of organization financial performance;  
means for creating a financial simulation model for the organization using said mappings, model and data;  
means for determining an optimal mix of process features using said simulation model, and  
means for displaying the optimal mix using a paper document or an electronic display  
where the computational model of financial performance analyzes the portfolio effect associated with organization elements of value, external factors and organization risks.

60. The apparatus of claim 59 that optionally displays an impact of the optimized feature mix on a position of the organization relative to an efficient frontier.

61. The apparatus of claim 59 that further comprises identifying an optimal mix of processes for the organization.

62. The apparatus of claim 59 where an optimal mix is the mix that maximizes organization value while minimizing organization risk.

63. The apparatus of claim 59 where a plurality of process feature data encapsulate the different options the process manager has for using the resources required to produce the process outputs.

64. The apparatus of claim 59 where a plurality of process feature data identifies any options for implementing a process feature at a future date .

65. The apparatus of claim 59 where a process specification further comprises data selected from the group consisting of design data, financial data, operating factor data, commodity prices and combinations thereof.

66. The apparatus of claim 59 where a process specification and a plurality of feature data are obtained from databases selected from the group consisting of a design system database, a process financial system database, an operating factor database and combinations thereof.

67. The apparatus of claim 59 where process simulation system data are optionally used to support method steps selected from the group consisting of identifying an impact of one or more process features on one or more process outputs, identifying an impact of one or more process outputs on a matrix of value, identifying an impact of one or more process outputs on a matrix of risk and combinations thereof.

68. The apparatus of claim 67 where an organization matrix of risk is defined by one or more organization segments of value and one or more organization related risks where the segments of value are selected from the group consisting of current operation, real option, derivative, excess financial asset, market sentiment and combinations thereof and where the organization risks are selected from the group consisting of variability risks, market volatility risks, contingent liabilities, event risks, extreme risks, normal risks, strategic risks and combinations thereof.

## **10. Evidence Appendix**

Pages 20 – 25

Declaration under Rule 132 submitted July 21, 2008

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Serial No.: 10/821,504

Applicant: Jeff S. Eder

Filed: December 23, 2002

Examiner: Sigfried Chencinski

Art Unit: 3692

Docket No.: AR - 65

Customer No: 53787

**DECLARATION UNDER RULE 132**

I, Rick Rauenzahn, do hereby declare and say:

My home address is 529 Calle don Leandro, Espanola, New Mexico. I have a B.S. degree in chemical engineering from Lehigh University, an S.M. degree in chemical engineering from The Massachusetts Institute of Technology and a Ph.D. in chemical engineering from The Massachusetts Institute of Technology. I have worked in the mathematical modeling field for 25 years concentrating in the disciplines of fluid mechanics, turbulence modeling, numerical methods for partial differential equations, radiation hydrodynamics, and strength of materials. I also have extensive knowledge of computer system administration, particularly for Windows-based, Linux, and UNIX systems. I have been employed by Los Alamos National Laboratory and Molten Metal Technologies for the past 24 years.

I further declare that I do not have any direct affiliation with the application owner, Asset Reliance, Inc. or with its licensee Kantrak, Inc. As described in prior declarations I have met the inventor who is the President of Kantrak.

On April 22, 2006, I was given a copy of U.S. Patent Application 09/688,983

entitled "An automated risk transfer system" filed in the United States Patent Office on October 17, 2000. Until that time I had not read the patent application. U.S. Patent Application 10/821,504 entitled "A Business Activity Management System" is a continuation of application 09/688,983 and as such has the same specification and drawings. I have studied the entire specification in order to closely analyze the claims and drawings. I am totally familiar with the language of the claims and conversant with the scope thereof. I completely understand the invention as claimed.

On June 25, 2008 I was provided with a copy of U.S. Patent Application 2001/0053991 by Eric W. Bonabeau (hereinafter Bonabeau). Until that time I had not read the patent application and I have not discussed it with anyone. Bonabeau describes aspects of developing market space ecosystem models that apparently have utility in selecting business models for a commercial enterprise that will optimize a metric (abstract, paragraph 13). Business models identify a combination of features (VP), prices (RM) and operational methods (OA) used in producing existing and planned offerings for a business (paragraph 23). Bonabeau also mentions but does not explain that if a stock market system is included in the market space model, then the metric being optimized may be able to include market capitalization (paragraph 11, paragraph 86).

Based on my experience and training in the field of mathematical modeling and electronic data processing, I have concluded that the Bonabeau system does not have any relevance to the system and method disclosed in application 09/688,983/10/821,504. There are several reasons for this:

1) the method disclosed in 09/688,983/10/821,504 for optimizing activities for a commercial enterprise by analyzing a model of enterprise value and risk teaches and relies on the use of different valuation methods for existing offerings (cash flow), planned offerings (real options for growth) and market sentiment. Bonabeau teaches away from this approach as it requires the use of a single category of metric to evaluate the performance of both existing and planned offerings (paragraph 13). Bonabeau does not teach or suggest anything about

market sentiment and cannot support its analysis or optimization (see item 8 for more detail).

2) the method disclosed in 09/688,983/10/821,504 for optimizing activities for a commercial enterprise by analyzing a model of enterprise value and risk teaches and relies on the fact that the levels of the components of current operation value (revenue, expense and capital change) and market sentiment are a function of the performance of a plurality of elements of value (i.e. brands, customers, employees, etc.) and/or a plurality of market value factors. In particular, the method disclosed in 09/688,983/10/821,504 relies on the development of summaries of element of value and market value factor performance (i.e., vectors or models) that can be used as inputs to predictive models that determine their impact on the levels of the components of current operation value and market sentiment. The use of element of value summaries, market value factor summaries, vector inputs and predictive models is not taught or suggested by Bonabeau. Bonabeau teaches away by relying on a combination of three part business models, expected behavior models for customers and suppliers and simulation to estimate external prices and market share (paragraphs 94 and 95) while ignoring the other elements of value and the other market value factors.

3) the method disclosed in 09/688,983/10/821,504 for optimizing activities for a commercial enterprise by analyzing a model of enterprise value and risk relies on a calculation of changes to the cost of capital for the business that is determined by the relative strength of the elements of value as quantified by a DEA analysis in order to value real options. Bonabeau does not teach or suggest anything related to DEA analysis or real option valuation and teaches away from the use of real options as discussed previously.

4) the method disclosed in 09/688,983/10/821,504 for optimizing activities for a commercial enterprise by analyzing a model of enterprise value and risk teaches and relies on scenario analysis. The inputs to the summaries of element of value and external factor performance mentioned under item 2 are analyzed in order to

identify the expected range of values for the summaries under different scenarios. The financial performance of the business is then simulated using the identified ranges under the different scenarios. The results from the scenario analysis are then used as inputs to a multi-criteria optimization analysis. Bonabeau does not teach or suggest element of value or external factor summaries (as discussed previously), the identification of ranges for element of value or external factor summaries, the development of scenarios and/or the use of scenario simulation results as inputs to an optimization analysis. Bonabeau teaches away by teaching single criteria optimization via the genetic evolution of different combinations features (VP), prices (RM) and operational methods (OA) for business models in a market space model (paragraphs 20 through 30).

5) the method disclosed in 09/688,983/10/821,504 for optimizing activities for a commercial enterprise by analyzing a model of enterprise value and risk teaches and relies on the use of element of value and sub-element of value level analyses. The Bonabeau disclosure teaches away from the use of element of value level analyses as it teaches an item level focus on the specific type and number of machine required for each unit of good or service (paragraph 70).

6) the method disclosed in 09/688,983/10/821,504 for optimizing activities for a commercial enterprise by analyzing a model of enterprise value and risk teaches and relies on measuring a number of different types of risk by element of value and external factor for each category of value. 09/688,983/10/821,504 also teaches risk management via risk transfer or risk reduction program management. Bonabeau does not teach or suggest anything related to measuring any type of risk and/or managing any type of risk via risk transfer or risk reduction program management. Bonabeau teaches away by teaching the selection of robust combinations of features (VP), prices (RM) and operational methods (OA) for business models in order to minimize the need for risk management (paragraph 59).

7) the method disclosed in 09/688,983/10/821,504 for optimizing activities for a

commercial enterprise by analyzing a model of enterprise value and risk teaches and relies on the use of up to four different methods for improving the financial performance: improving cash flow, improving real option value, improving market sentiment value and/or reducing risk (via management or transfer). Bonabeau teaches away from each of these four methods as it teaches that there is only one method for improving financial performance: improving the fit of the three part business models (features (VP), prices (RM) and operational methods (OA)) within a market space ecosystem (abstract, paragraphs 20 through 30).

8) the method disclosed in 09/688,983/10/821,504 for optimizing activities for a commercial enterprise by analyzing a model of enterprise value and risk teaches and relies on the analysis of market sentiment using predictive models and the element of value summaries mentioned previously. Also as mentioned previously, Bonabeau cannot support the analysis and/or optimization of market sentiment because it has no capability for identifying a relationship between the specified variables (features, prices, operational methods, customer behavior and supplier behavior) and market sentiment. This same limitation prevents the Bonabeau system from analyzing or optimizing derivatives and investments.

9) the method disclosed in 09/688,983/10/821,504 for optimizing activities for a commercial enterprise by analyzing a model of enterprise value and risk teaches and relies on the fact that building relationships with customers and vendors improves value. Bonabeau teaches away from this approach by teaching a method for business model optimization where the propensities for customers to switch suppliers each period and for suppliers to be changed every period in response to price changes are parameterized in a simple fashion as an input to the business model adaptation process. Thus, Bonabeau's method provides no means to access the enterprise value that arises by forming said relationships.

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both



under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patents issuing thereon.

Signed,

/Rick M. Rauenzahn/

Rick M. Rauenzahn

Date: July 11, 2008

**11. Related Proceedings Appendix (None)**